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# Anti-CD3-AcalephFluor555-labled

Catalog # AP100413

## Product Information

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| **Application** | FC, IF/IC |
| **Primary Accession** | P04234, P07766, P09693, P20963 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Calculated MW** | 18930 |

## Additional Information

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| **Gene ID** | 915 |
| **Other Names** | T3D; T-cell surface glycoprotein CD3 delta chain; T-cell receptor T3 delta chain; CD antigen CD3d; T3E; T-cell surface glycoprotein CD3 epsilon chain; T-cell surface antigen T3/Leu-4 epsilon chain; CD antigen CD3e; T3G; T-cell surface glycoprotein CD3 gamma chain; T-cell receptor T3 gamma chain; CD antigen CD3g; CD3Z; T3Z; TCRZ; T-cell surface glycoprotein CD3 zeta chain; T-cell receptor T3 zeta chain; CD antigen CD247 |
| **Target/Specificity** | Recognizes human CD3 |
| **Dilution** | FC~~1:10~50 IF/IC~~N/A |
| **Format** | Mouse IgG2a. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

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| **Name** | CD3D |
| **Synonyms** | T3D |
| **Function** | Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR- mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD247/CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:2470098). In addition of this role of signal transduction in T- cell activation, CD3D plays an essential role in thymocyte differentiation. Indeed, participates in correct intracellular TCR-CD3 complex assembly and surface expression. In absence of a functional TCR-CD3 complex, thymocytes are |

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| | unable to differentiate properly. Interacts with CD4 and CD8 and thus serves to establish a functional link between the TCR and coreceptors CD4 and CD8, which is needed for activation and positive selection of CD4 or CD8 T-cells (PubMed:12215456). |
| **Cellular Location** | Cell membrane; Single-pass type I membrane protein |
| **Tissue Location** | CD3D is mostly present on T-lymphocytes with its TCR-CD3 partners. Present also in fetal NK-cells |

## Background

AcalephFluor555-labled mouse monoclonal antibody to CD3

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.